



STATEMENT OF QUALIFICATIONS
Energy and Oil & Gas sectors
LNG/NG/LPG & Oil Processes

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PRINCIPAL CONSULTANT ENGINEER

JOSÉ R. AGRAMONTE E., BSc. ENG., MBA, CFPS, SFPE

- LNG process engineer: feasibility study and FEED to detailed engineering
- Commissioning, start-up, and commercial operations phases
- Fire protection
- Risk assessment (FRA/QRA)
- HAZID/HAZOP reviews
- Inspection, codes compliance and audits
- Support in Tie-in, LOTO Master, decommissioning and major maintenances processes.
- LNG plants and gas pipelines short-mid-term commercial operations
- LNG plants operators training, fire protection and emergency response

CV SUMMARY

Bilingual Sr. consulting engineer with 26 years of experience in Energy and Oil & Gas sectors, with specialized knowledge and training in liquefied natural gas (22-yr in LNG) processes and fire protection. Worked with multinational corporations to achieve full EPC contracts, owner engineer contracts, commissioning and commercial operation integration phases, and handover to owner operations. Achieved operational excellence records without LTA's. Engaging, professional LNG terminals operations and fire protection trainer with presentations given to 850+ participants throughout Latin America. Facilities covered include 120k-180k cbm LNG import and regasification terminals, mid-scale and satellite plants up to 10k cbm, pipelines up to 50 kms, 20in at 60 Barg MAWP, natural gas CityGates and NG regulation and metering stations for domestic, industrial, and commercial applications, vehicular natural gas fuel system (LCNG & CNG). The processes cover integrations with combined and simple cycle power plants, GenSets-based power plants, coal fired power plants, boilers and kilns conversions, combined heat and power (CHP) NG and LPG fired, and several industrial processes including mining, metallurgy, food, beverages and pharmaceutical.

SEICO-CRYOGAS NATURAL (2007 TO PRESENT); PRINCIPAL CONSULTANT ENGINEER

With Ja Seico & Asoc., S.R.L., Principal Consultant Engineer. Provide front-end engineering and design (FEED), detailed engineering, and EPC contracts for multiple mid-scale and satellites LNG storage & regasification systems. Conduct code compliance inspections for LNG storage and regasification plants; satellites (SRS), and small and large sizes import and regasification facilities, pipelines and fire protection infrastructures including FRA/QRA and HAZID/HAZOP reviews; owner engineer, commissioning, short-to-mid-term commercial operations contracts, and handover to facility owner.

ENERGY AND OIL & GAS SUMMARY

SUMMARY OF QUALIFICATIONS: KEY PROJECTS AND TECHNICAL PAPERS

1. **CONSORCIO ENERGÉTICO PUNTA CANA MACAO (CEPM); DETAILED ENGINEERING FOR THE LNG STORAGE AND REGASIFICATION SATELLITE PLANT EXPANSION PROJECT [NOVEMBER 2024 - PRESENT], STATUS, ONGOING ENGINEERING PHASE**

The project consists of 5 x 200 cbm, existing plus 2 x 350 cbm added LNG storage and regasification facility by means of VIT technology with a net dispatch rate of 20,000 Nm³/h. The facility feeds a dedicated twin-pipeline for two local GenSets- based power plants and a peak shaving gas turbine-based power plant.

MAIN RESPONSIBILITIES

- Provide detailed engineering for the LNG storage and regasification plant expansion project.
- Provide As-Built P&IDs, plant layout and drawings for the existing and the expansion project.
- Conduct fluid analysis and calculations for the existing and expansion plant.
- Review operational procedures and documentation according to the existing and expansion plant.

2. **EPC CONTRACT FOR AN IMPORTANT GROUP IN THE CARIBBEAN REGION; PROVIDE EPC CONTRACT FOR THE LNG STORAGE AND REGASIFICATION SATELLITE SYSTEM [FEBRUARY 2023 - PRESENT]; STATUS, ONGOING EPC PHASES**

The project consists in a combination of an LNG storage and regasification plant to supply a GenSet-based power plant. Project confidential until commercial operation phase.

MAIN RESPONSIBILITIES

- Provide EPC contract for the LNG plant
- Provide engineering calculations and sizing, protective relays philosophy, and grounding and lightning protection system for the power block as per the NEC and IEEE requirements.
- Conduct LNG plants operators training

3. **PRINCIPAL CONSULTANT ENGINEER, FUEL BLOCK (LNG/LPG) FOR AN IMPORTANT GROUP IN THE CARIBBEAN REGION; COMBINED HEAT AND POWER (CHP) PLANTS [JANUARY 2022 - PRESENT]; STATUS, ONGOING EPC PHASES**

The projects, three in total, consist in different combinations of NG and LPG fired CHP plants. The CHP plants are accomplished by means of GenSets-based and gas turbine-based plants. Projects are confidential until commercial operation phase.

ENERGY AND OIL & GAS SUMMARY

MAIN RESPONSIBILITIES

- Provide engineering reviews including calculations and sizing
- Provide P&ID reviews, plant layout and drawings
- Code compliance
- Follow up on project timeline
- Follow up on Commissioning and start up activities
- Documentation, manuals, procedures and dossiers reviews
- Handover to plant operator

4. BARBADOS NATIONAL OIL CO. LTD (BNOCL), LEADING UPSTREAM AND DOWNSTREAM OIL & GAS AND PV ENERGY IN BARBADOS, [NOVEMBER 2021 - PRESENT]; STATUS, ONGOING CONSULTING SERVICES

BNOCL and its subsidiaries; Barbados National Oilfield Services Limited (BNOSL), Barbados National Terminal Company Limited (BNTCL) and Barbados National Oil Holding Company Limited (BNOHCL), is an Energy Group leading Barbados sustainable energy revolution while enhancing the quality of life for all Barbadians.

BNOCL operates the natural gas fields production plant along with the LNG peak shaving plant to supply the extended pipelines system for domestic, industrial and commercial end users.

MAIN RESPONSIBILITIES

- Provide consulting in the LNG plant operations
- Provide engineering reviews for LNG plant upgrade
- Provide equipment sizing, commissioning and servicing
- Review the equipment manuals and procedures to support the bunkering operations.
- Conduct LNG plants operators training, for new operators and refresher training.
- Conduct the QRA for LNG plant and pipelines system

5. BARBADOS NATIONAL PETROLEUM CORPORATION (NPC); MANAGEMENT OF THE DISTRIBUTION AND SUPPLY OF NATURAL GAS IN BARBADOS [NOVEMBER 2021 - PRESENT]; STATUS, ONGOING CONSULTING SERVICES

NPC is responsible for the management of the distribution of natural gas supply in Barbados for domestic, commercial and industrial use.

MAIN RESPONSIBILITIES

- Conduct LNG plants and NG pipelines operators training, for new operators and refresher training.

ENERGY AND OIL & GAS SUMMARY

- Review the equipment manuals and procedures for new equipment commissioning.

6. AES DOMINICANA “SAFETY DAY SEMINAR”; CONDUCTED FOR LNG PLANTS OWNERS AND OPERATORS, TRANSPORTERS AND AHJ [JUNIO 2022 - JUNIO 2022], STATUS, COMPLETED

AES Dominicana is the top leading company in the Energy & Gas sectors in the Dominican Republic.

MAIN RESPONSIBILITIES

- Conduct full day seminar on “*Best practices and methodological guidelines for natural gas safety management, risk analysis and emergency response*”; 350+ participants in room and by streaming.

7. AES ANDRES-ENADOM LNG IMPORT AND REGASIFICATION TERMINAL EXPANSION PROJECT; SUPPORT THE PLANT EXPANSION COMMERCIAL OPERATION PHASE; [DECEMBER 2023 - JULY 2024], STATUS, IN COMMERCIAL OPERATION

The LNG terminal expansion consists of a new 120,000 cbm LNG storage tank with related process for BOG handling by means of BOG compressors and a recondensation system; and a pipeline compressors system, NG sendout and LNG reloading capacity. The existing plant and the new expansion add up a total of 280,000 cbm storage with a net 750 MMCFD dispatch capacity.

MAIN RESPONSIBILITIES

- Support the LNG terminal expansion project commercial operation phase.
- Conduct daily activities to support the plant operation
- Support LNG ships unloading operations
- Conduct LNG transfer between tanks, LNG reloading
- Follow-up on pending issues (Punch-List)
- Write weekly operational report
- Support LNG plant operators cross training

8. AES ANDRES-ENADOM (WITH SOLDZOZA) LNG IMPORT AND REGASIFICATION TERMINAL EXPANSION PROJECT; SUPPORT THE PROJECT COMMISSIONING AND INTEGRATION PHASES; [AUGUST-NOVEMBERS 2023]; STATUS, COMPLETED

The LNG Terminal expansion consists of a new 120,000 cbm LNG storage tank with related process for BOG handling by means of BOG compressors and a recondensation system; and a pipeline compressors system, NG sendout and LNG reloading capacity. The existing plant and the new expansion add up a total of 280,000 cbm storage and a net 750 MMSCFD dispatch capacity.

ENERGY AND OIL & GAS SUMMARY

MAIN RESPONSIBILITIES

- Support the commissioning and integration phases with the existing LNG plant from process safety perspective.
- Process and tie-in points review with existing facility
- Codes compliance
- LOTO Master; E&IC, operational and mechanical
- Conduct daily SWP flow audit

9. BARRICK PVDC MINING COMPANY; LNG STORAGE AND REGASIFICATION SATELLITE PLANT, [DECEMBER 2021- FEBRUARY 2022]; STATUS, IN COMMERCIAL OPERATION

The project consists of 2 x 350 cbm existing plus 1 x 350 cbm at future to add a total of 1050 cbm LNG storage and regasification facility by means of VIT technology with a net dispatch rate of 17,169 Nm³/h and a projected expansion to double current rate. The project includes a 1.2 km pipeline to mainly feed the lime kilns and others spot consumptions.

MAIN RESPONSIBILITIES

- Complete the detailed engineering design
- Oversee mechanical completion with CODEMOM as M&E contractor
- Oversee mechanical completion with INTELCA as I&C and HIM/SCADA contractor.
- Commissioning, start up and commercial operation integration phases
- Conduct LNG plants operators training
- Conduct LNG basics and nearby communities Fire Departments emergency response on LNG/NG.
- Conduct LNG basics and emergency response on LNG/NG to InSite responders (ERT).
- Short-term commercial operation contract [March-August 2022]
- Long-term O&M consulting [September 2022-Present]

10. LNG STORAGE AND REGASIFICATION SATELLITE PLANTS (2015-2021); STATUS, COMPLETED

With GasEner S.R.L. (contract); Owner Engineer's Technical Director for several projects.

MAIN RESPONSIBILITIES

- FEED, design philosophy and engineering development
- Code compliance
- Supervise Mechanical Completion
- Procurement follows up

ENERGY AND OIL & GAS SUMMARY

- Commissioning and integration phases
- Support documentation
 - Engineering calculations, electrical and fluid analysis
 - Equipment sizing
 - PRV/PSV sizing
 - Control and Operation philosophy
 - Commissioning, operational and Interlock manuals
 - Emergency response
 - HAZID/HAZOP and QRA reviews
 - LNG plants operators training

11. LNG STORAGE AND REGASIFICATION SATELLITE PLANTS; (2019-2021); STATUS, IN COMMERCIAL OPERATION

With GasEner (contract), Owner Engineer's Technical Director for the LNG storage and regasification plants in Santa Fe and Tortí, Republic of Panama. The projects consist of 2 x 127 cbm with a net dispatch rate of 2,500 Nm³/h per train, and 1 x 80 cbm with a net dispatch rate of 2,500 Nm³/h per train for IPSA Power Generation company. The LNG plants serve two NG fired GenSet-based power plants.

MAIN RESPONSIBILITIES

- Code compliance
- Supervise Mechanical Completion
- Commissioning and commercial integration phases
- Support documentation
 - Operational Procedures
 - LNG plants operators training
 - LNG Trailer and pump offloading manual

12. CONSORCIO GASODUCTO DEL ESTE (CGE) FOR AES ANDRES'S EASTERN PIPELINE COMMISSIONING AND HANDOVER TO COMMERCIAL OPERATION; [APRIL 2020 - JULY 2020]; STATUS, COMPLETED

Project Manager (contract) to support the commissioning and initial operation phases for CGE. The pipeline runs from the AES LNG import terminal to San Pedro de Macoris, Dominican Republic. The project accomplishes 52 km at 20in and 60 Barg MAWP to feed various power plants in the eastern region.

MAIN RESPONSIBILITIES

- Support the pipeline commissioning phase
- Conduct the pipeline operations over a 24/7 basis - 2x12 hours shift covering the HMI operations and the 8 block valves stations along the route.

ENERGY AND OIL & GAS SUMMARY

- Keep track of real time operations
- System and components integrity
- Prepare operational reports
- Handover to facility operator

13. AES LNG IMPORT TERMINAL [2002-2014, AS EMPLOYEE FOR 12 YEARS]

Commissioning, start-up phases and operations for the LNG terminal and related pipelines running from site to different facilities [Shift Team Leader]. Worked actively in the LNG regasification third train expansion project and the LNG Truck Loading facility, all from scratch. Appointed Loading Master with over 100+ ships offloaded and 1,350+ trucks loaded without LTA's; being awarded an operational safety record.

MAIN RESPONSIBILITIES

- Conduct 150-170k cbm LNG cargos unloading operations
- Conduct LNG terminal, trucks loading and pipelines daily operations.
- Conduct custody transfer and NG dispatch for related pipelines
- Support the daily projects and maintenances activities
- Write daily and weekly operational reports
- Conduct new operators training

14. EMPRESA DE GENERACIÓN ELÉCTRICA PUNTA CATALINA (EGEPC); FIRE AND GAS (F&G) AND DETECTION SYSTEM AND FIRE PROTECTION SYSTEM; (MARCH 2018 - NOVEMBER 2019); STATUS, COMPLETED

Project Manager (contract) to support the commissioning and commercial integration phases for the F&G and Detection system and the Fire Protection system for Punta Catalina. EGEPC is coal-fired 750 MW, Dominican Republic).

MAIN RESPONSIBILITIES

- Code's compliance
- Supervise Mechanical Completion
- Commissioning and start-up
- Loop checks
- Cause & Effect Matrix
- F&G and Detection system is accomplished by mean of Simplex Grinnell 4100 FACP
- The F&G and detection system is achieved with the incorporation of a cutting-edge Simplex Grinnell fire alarm control panel (FACP) 4100, 16 FACP distributed along the facility.

ENERGY AND OIL & GAS SUMMARY

- The fire protection system is accomplished via a combination of a water based 2 x 5000 gpm, 15 NOVEC systems, 2 CO2 system, 6 fixed water spray fire protection, and 2 foam systems. Commissioned and integrated as per NFPA 4, “*Standard for Integrated Fire Protection and Life Safety System Testing*”.

ASSOCIATED TECHNOLOGIES

- Simplex Grinnell 4100 FACP
- 16 FACP and 4,600 combined components distributed along the facility: beacons, sirens, pull stations, smoke detectors, gas detectors, flow switches, etc.
 - Simplex
 - Dragger
 - Patol
 - Linear heat detectors and Fire-optic fire detection (protectowire).
 - MSA

15. SUMMARY LNG PLANT OPERATORS' TRAINING

- Barbados (x5)
- Bolivia
- Colombia
- Dominican Republic (x14)
- Haiti (x2)
- Panama (x8)
- Perú (x6)

16. TECHNICAL PAPERS

- Dominican Republic's energy matrix efficiency by mean of conversion from oil to natural gas.
- Risk assessment (FRA/QRA), fire protection and emergency response in oil and liquefied natural gas (LNG) terminals.

17. EXPERIENCE WITH ENGINEERING SOFTWARES AND HMI/SCADA CONTROL SYSTEMS IN THE ENERGY AND OIL & GAS SECTORS

- Reference Fluid Thermodynamic and Transport Properties (REFPRO)
- Aspen HYSYS (HYSYS)
- Pipe Flow Calculators
- PTC MathCad

ENERGY AND OIL & GAS SUMMARY

- SAFETI & PHAST Risk
- NavisWorks
- AutoCad
- DCS control system-based operation
- PLC control system-based operation
- PLC control system-based operation
- OVATION control system-based operation

FUNDAMENTAL ACADEMIC PROFICIENCY: DEGREES, CERTIFICATIONS AND MEMBERSHIPS

- Certified fire protection specialist, NFPA-CFPS # 3683, 2023-valid through 2026, USA.
- Maritime fire protection specialist as per SOLAS and IMO requirement, Lloyd Maritime Academy, UK, 2020 program.
- LNG terminal operators training, the Gas Technology Institute (GTI), Chicago, IL, USA, 2004-2012 programs.
- LNG jetty operator, the Centre for the Marine Studies, UK, 2003
- Liquid natural gas (LNG) fire training, Texas A & M-TEEEX, College Station, TX, USA.
- Liquid natural gas (LNG) fire training, The Northeast Gas Association, Boston, Fire Training School, Boston, MA, USA, 2006-2009.
- International Advance Member NFPA # 3021812, USA
- Risk Assessment training, the Society of Fire Protection Engineers, SFPE, 2023 program.
- Society of Fire Protection Engineers, SFPE # 39070, USA
- The National Association of Fire Investigators (NAFI), NAFI # 20342, USA.
- Project Management, Oscus San Valero, Spain, 2005-2006.
- BSc Eng. (electrical), UASD, 1999
- MBA, UASD, 2005